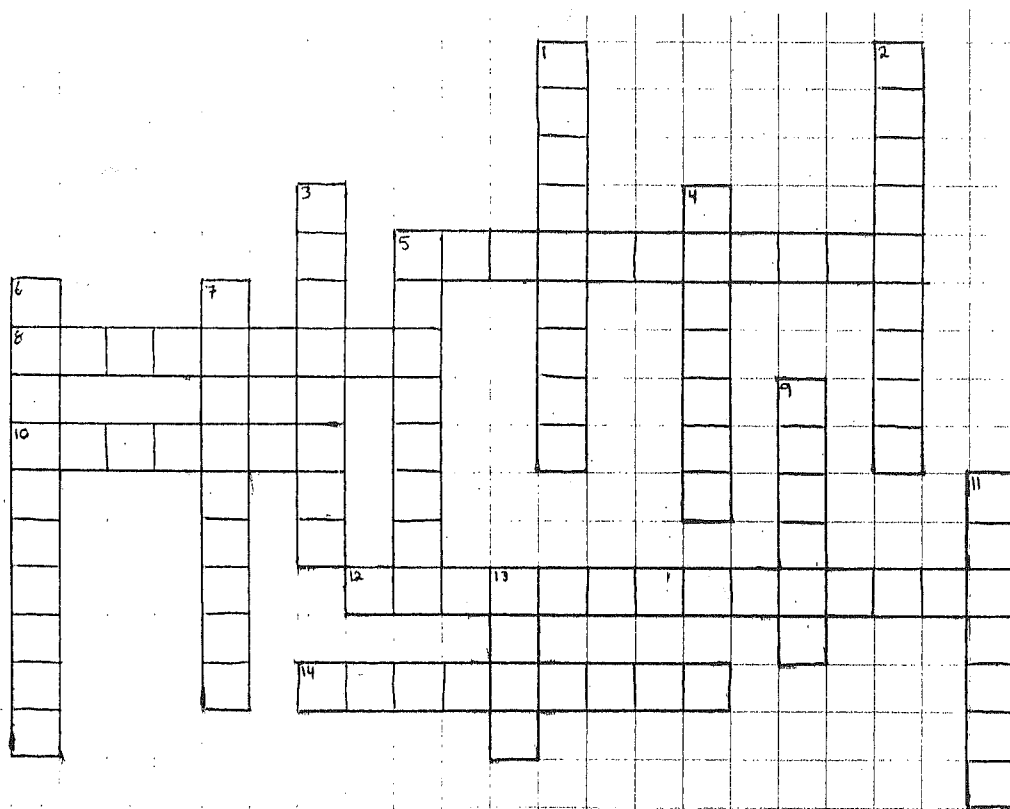


## Chapter 2

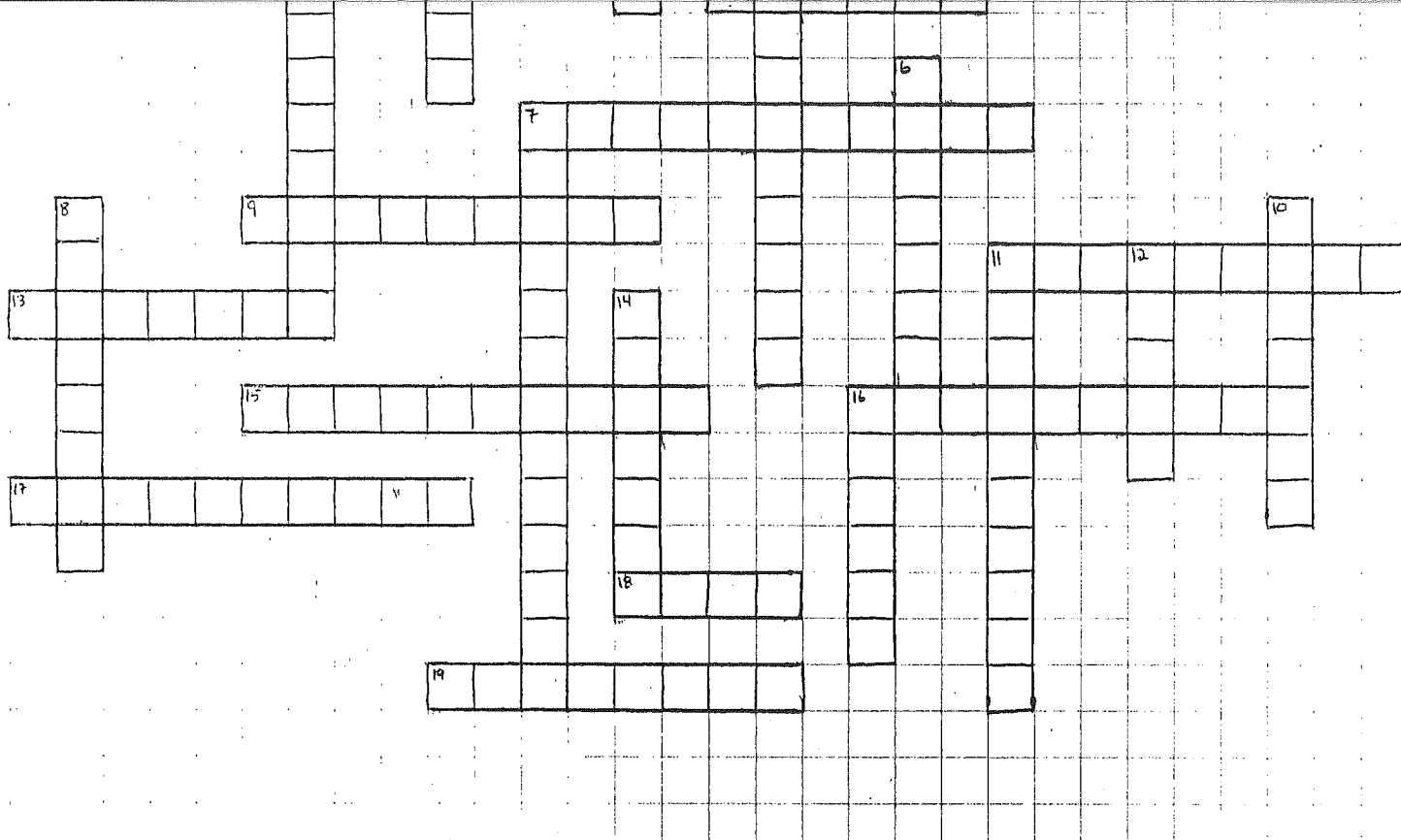


### Across

5. external shape of crystals
8. hydrous, ferromagnesian, double-chain silicates
10. dark mica, rich in iron and magnesium
12. silicate containing significant iron and/or magnesium
14. all rocks are continually subject to being transformed into another type of rock

### Down

1. group of framework silicates, most abundant minerals in the crust
2. same chemical composition, different crystal structure
3. single chain silicates, mostly ferromagnesian
4. the simplest kind of chemical substance
5. tendency of a mineral to break along planes in the crystal structure
6. these fizz with acid
7. mineral containing silicon and oxygen
9. surface sheen exhibited by a mineral
11. a naturally occurring, inorganic, solid element or compound with a definite composition and a regular internal crystal structure
13. solid, cohesive aggregate of one or more minerals

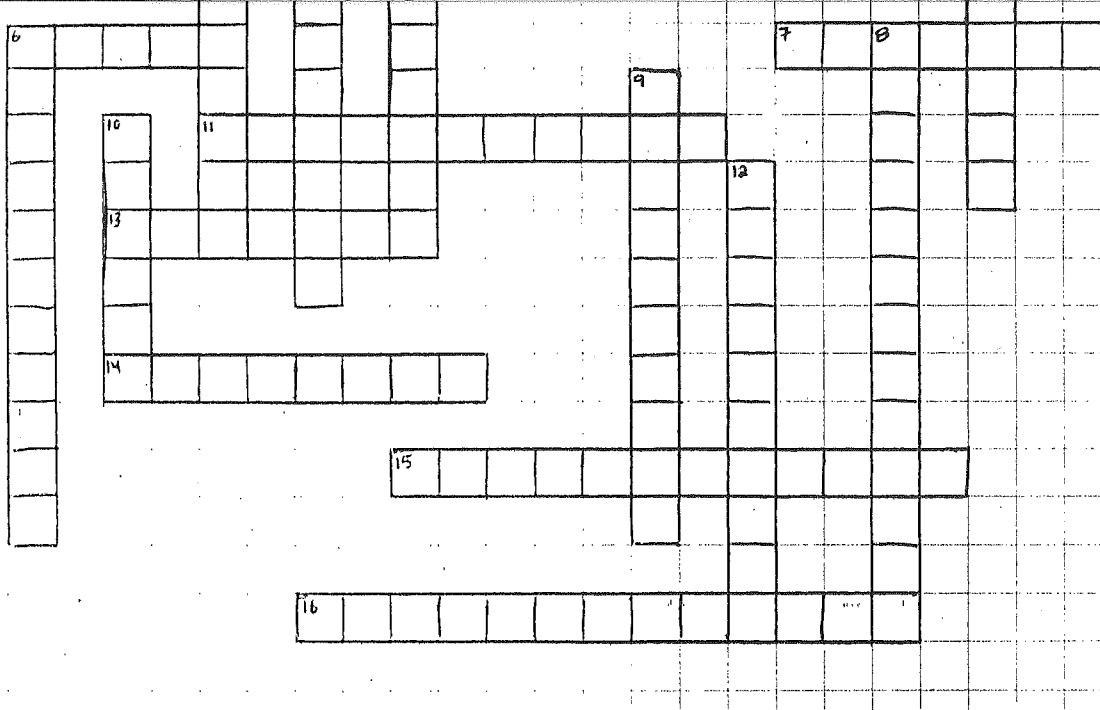


### Across

3. grains too fine to distinguish with naked eye
4. rock rich in feldspar and silica
7. rock into which a pluton is intruded - wallrock
9. massive, discordant pluton, often produced by multiple intrusions
11. a very coarse-grained igneous rock ( >1cm)
13. a plutonic rock rich in quartz and potassium feldspar
15. having contacts parallel to the layers of adjacent rocks
16. grains course enough to distinguish with naked eye (1-10mm)
17. the finer-grained matrix of a porphyritic rock
18. a tabular, concordant pluton
19. a rock caught up in a magma as an inclusion

### Down

1. mafic volcanic rock; volcanic equivalent of gabbro
2. a tabular, discordant pluton
3. magma incorporates and melts bits of country rock
5. igneous rock erupted onto the earth's surface
6. a concordant pluton with a sagging floor
7. fine-grained rock at the edge of a pluton; shows the effect of rapid cooling
8. an igneous rock with coarse crystals in a fine-grained groundmass
10. rich in silica (SiO<sub>2</sub>) (lower melting temperature)
11. a coarse crystal in a porphyritic rock
12. rich in iron and magnesium (high melting temperature)
14. formed from or related to magma
16. a body of igneous rock that crystallized at depth



### Across

1. rock or sediment precipitated directly from solution
4. depositional layering
6. clastic sedimentary rock made of clay-sized particles, tends to break in parallel layers
7. spheroidal carbonate grains formed in concentric layers
11. sediments stuck together through the deposition of mineral material between grains
13. rock or sediment made of fragments of preexisting rocks and minerals
14. unconsolidated rock and mineral grains and organic matter that was transported by wind, water or ice
15. clastic sedimentary rock consisting of rounded fragments in a finer-grained matrix
16. landward encroachment of the sea

### Down

2. very fine-grained clastic, siltstone or claystone
3. sediments produced by biological processes
4. clastic sedimentary rock consisting of angular fragments in a finer-grained matrix
5. a carbonate mineral  $\text{CaMg}(\text{CO}_3)_2$
6. rock formed at and near the earth's surface from sediment
8. conversion of sediment into rock
9. compression and consolidation of sediment under compressive stress
10. set of conditions that leads to the formation of particular type of sediment or sedimentary rock
12. set of processes by which lithification is accomplished; lower temperature than metamorphism